Preparation of the PHENIX Central Magnet for Routine Operation

PHENIX Procedure No. PP-2.5.1.3-02

Revision: B **Date: 11/13/2009**

Hand Processed Changes

HPC No.	Date	Page Nos.	Initials

Approvals

11/19/09
PHENIX S E & I Date

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Cognizant Scientist/Engineer Date
/Activity Manager

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REVISION CONTROL SHEET

LETTER	DESCRIPTION	DATE	WRITTEN BY	APPROVED BY	Current Oversight
A	First Issue	03/02/2000	n/a	J. HaggertyW. Lenz, (other unintelligible)	n/a
B	Reviewed and found to be OK as is	11/13/2009	D. Lynch	P.Giannotti, D. Lynch, R. Pisani	P. Giannotti

1.0 Purpose and Scope

The purpose of this procedure is to prepare for operation of the PHENIX magnet. The procedure consists of ensuring that barriers, warning signs, and lights are in place before energizing the power supplies.

2.0 Responsibilities

2.1. The PHENIX Run Coordinator is responsible for initiating and participating in this procedure.

2.2. The Collider Accelerator Support (CAS) watch is responsible for unlocking the power supplies.

2.3. The CAS watch is responsible for LOTO of the power supplies when requested by the PHENIX Run Coordinator.

2.4. The PHENIX Run Coordinator or his designee is responsible for locking the CM magnetic safety interlock key, in the designated place in the PHENIX control room, when the Central Magnet is not in operation.

2.5. The PHENIX Run Coordinator or his designee is responsible for locking out the crane in the Interaction Region when the magnet is on, but may approve operation that he determines to be safe on an individual basis, subject to work permit, approved by Work Control Coordinator, or PHENIX Liaison Physicist, or PHENIX Liaison Engineer.

2.6. The PHENIX Run Coordinator is responsible for setting up the barriers at the 500 Gauss limits. Signs will be posted at the barriers warning: “Danger High Magnetic Field.”

3.0 Prerequisites

3.1. The PHENIX magnet operators shall consist of PHENIX shift leaders. They will be responsible for setting the currents for PHENIX CM operation.

3.2. Whenever the magnet is enabled or powered the PHENIX shift watch needs to be present.

3.3. Before the magnet can be run the PHENIX Run coordinator or designee shall ensure the barriers, as shown in Attachment 8.1, are in place.

3.4. The PHENIX RUN Coordinator shall make sure that the 5 Gauss perimeter shall be posted, as delineated by ES&H technician, to warn personnel with a medical implant or pacemaker.

3.5. The PHENIX Run Coordinator or his designee shall make sure that the area within 500 Gauss limit is cleaned up, with no loose magnetic material there.

3.6. Before the first operation of the magnet in a running period the CAS watch shall complete the white sheet, check list, which includes check of the accessibility and operation of the crash buttons, and blinking magnet on lights located near the corners of the magnet's iron.

4.0 Precautions

None

5.0 Procedures

5.1. The PHENIX Run Coordinator shall call the CAS watch to remove the CAS LOTO on the CM power supply so that it can be controlled by PHENIX.

5.2. The PHENIX Run Coordinator shall enable CM magnetic safety key interlock located in the rack PCR.0.5 in the PHENIX control room.

5.3. The PHENIX Run Coordinator or the Shift Leader shall inform any personnel close to the magnet, including those on the East, West platforms and scaffolds that the magnet is about to be powered.

5.4. The CAS watch shall prepare the power supplies for use to the point that the magnet is in standby with local control. The power supplies shall be kept in local control at Zero current.

5.5. The PHENIX Run Coordinator will then complete the check-list, Attachment 2.

5.6. The signed check list shall be given to the Shift Leader for entry into the log. A new check list will be needed whenever the barriers have been disturbed.

5.7. The CAS watch shall now set the power supplies to "standby" and "remote", to give control to the PHENIX Run coordinator.

6.0 Documentation

None

7.0 References

None

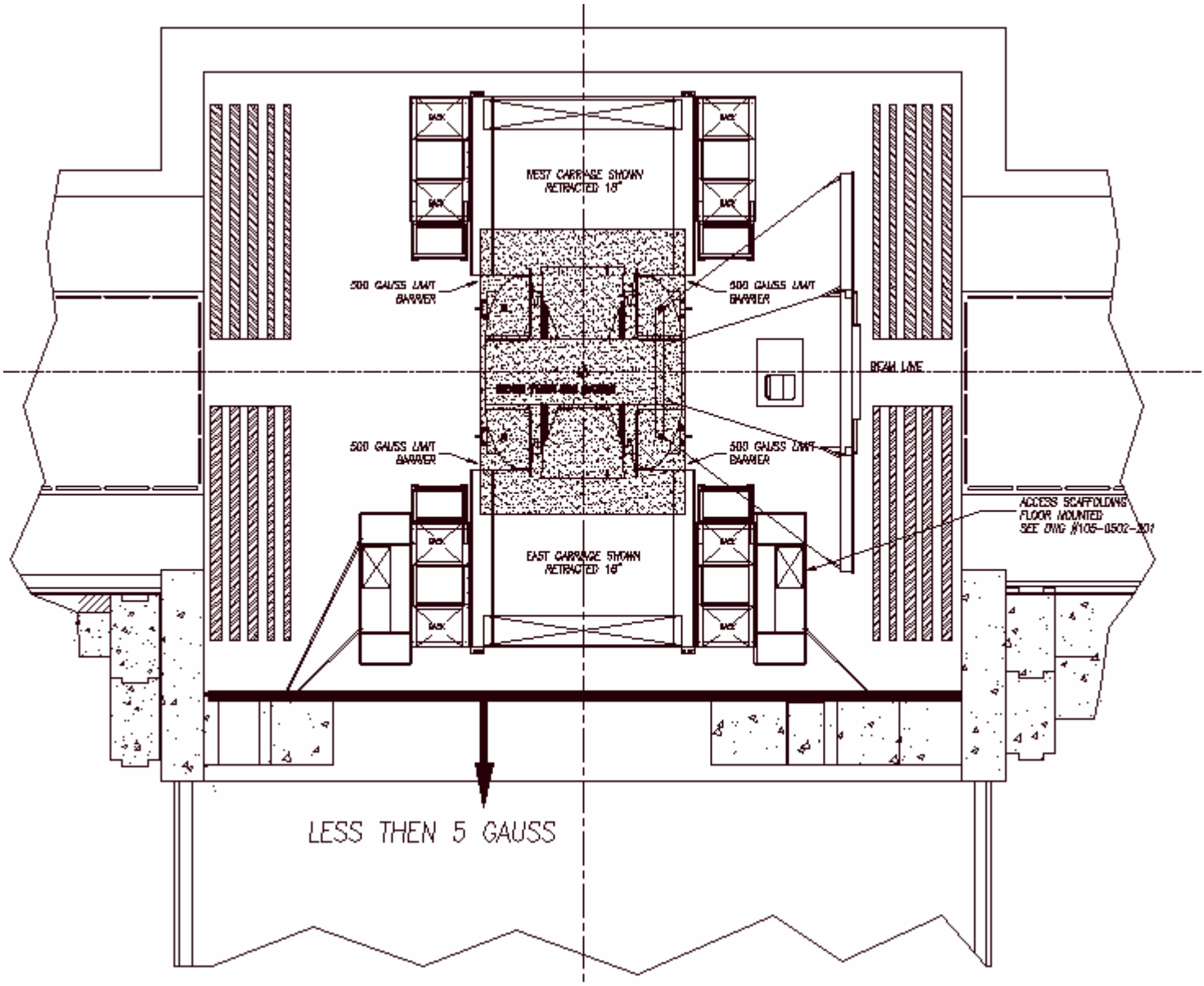
8.0 Attachments

1. This shows the location of the magnetic field barriers at the East and West ends of the magnet (the two are “mirror images”).

2. Check List for Barriers and Lights

Attachment 1

Location of Magnet Field Barriers



Attachment 2

Check List for Barriers and Lights

NAME:_____ (PHENIX Run Coordinator)
(print)

The following checks were performed:	**Initial**
Two North Barrier, 500Gauss limit	_____
Two South Barrier 500 Gauss Limit	_____
Northeast Magnet on Light	_____
Northwest Magnet on Light	_____
Southeast Magnet on Light	_____
Southwest Magnet on Light	_____
5 Gauss Perimeter Posted	_____
Magnet On Warning Light	_____
Lights in the PHENIX Control Room	_____

Signed: _____ **Date:** _____